THE ROLE OF FERROELECTRICS IN SPACECRAFT FOR THE NEW MILLENNIUM

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Ferroelectric technology offers unique opportunities in data storage and on-board processing, for NASA's next generation microspacecraft and missions, currently on the drawing board. This paper will highlight the role that the ferroelectrics technology can play to provide new ways for designing the "new millenium" spacecraft. The characteristics of the emerging ferroelectric memory technology that are favorable in perspective of the upcoming mission needs include: the features of high speed random access, non-volatility, low power operation, and potential for analog operation. Specific issues such as scalability and space environment readiness, that need attention for making ferroelectrics a serious contender for NASA applications will be identified.

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